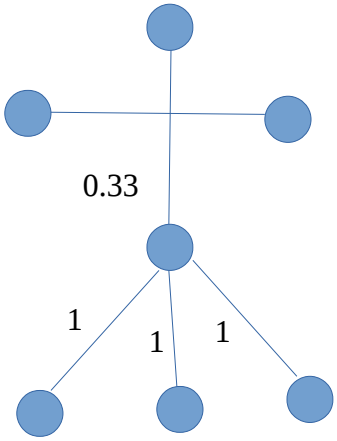

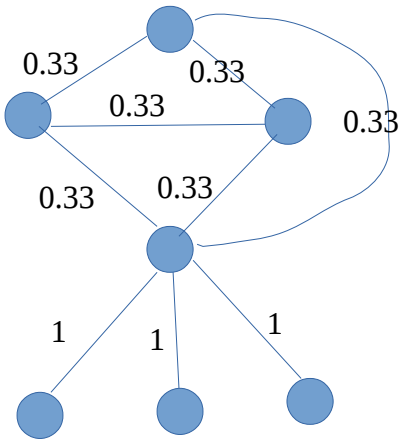

D_value update = D' + 2 * (Distance of same group node) – 2 * (Distance of different group node)

$g_{AB} = D_A + D_B - 2 *$ (Distance between A and B)

Results for experimental runs done with the KL partitioning implementation:

Benchmark circuit: 151 nodes 167 edges
spp_N151_E167_R11_80_nodes.txt
spp_N151_E167_R11_80_nets.txt

Initial Cut Size	Final Cut Size
108.32	24.6
97.54	20.7
110.97	20.52
112.991	23.7
107.3	20.71

Benchmark circuit: 151 nodes 192 edges
spp_N151_E192_R8_232.nodes.txt
spp_N151_E192_R8_232.nets.txt

Initial Cut Size	Final Cut Size
125.85	34.73
133.28	38.57
131.21	35.28
130.63	34.32
132.1	38.01

Benchmark circuit: 179 nodes 225 edges
spp_N179_E225_R11_158.nodes.txt
spp_N179_E225_R11_158.nets.txt

Initial Cut Size	Final Cut Size
140.83	41.6
136.17	36.61
146	41.26
146.96	35.28
166.97	36.28

Benchmark circuit: 189 nodes 227 edges
spp_N189_E227_R6_229.nodes.txt
spp_N189_E227_R6_229.nets.txt

Initial Cut Size	Final Cut Size
161.08	44.15
172.16	33.8
156.67	30.58
149.29	34.78
165.02	35.7

Benchmark circuit : 193 nodes 227 edges
spp_N193_E227_R11_153.nodes.txt
spp_N193_E227_R11_153.nets.txt

Initial Cut Size	Final cut size
161.78	52.93
173.42	31.14
157.59	26.96
160.65	37.96
154.98	31.14

Benchmark circuit : 199 nodes 232 edges
spp_N199_E232_R11_154.nodes.txt
spp_N199_E232_R11_154.nets.txt

Initial Cut Size	Final cut size
151.72	22.88
163.61	20.48
133.15	39.94
143.04	23.47
141.6	21.58